

### **DETAILED ACTION**

1. In view of the appeal brief filed on 02/03/2011, PROSECUTION IS HEREBY REOPENED. A new ground of rejection set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below

### **EXAMINER'S AMENDMENT**

- 2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Yonggang Ji (53,073) on 02/18/2011.

The application has been amended as follows:

Claim 1(Amended): A method of analyzing a plurality of biological entities using an imaging apparatus, the method comprising:

- a) acquiring a first image of the biological entities;
- b) adding a marker to said plurality of biological entities after the first image is acquired, said marker being capable of identifying objects within said plurality of biological entities when detected using the imaging apparatus,
- c) recording a marked-up image in which spatial definitions of said objects are identifiable from said marker; and
- d) generating a spatial definition for an object in said first image using data derived from said marked-up image [-] ;
- e) acquiring an initial series of images before adding a marker and recording a marked up image, and applying the spatial definition to the initial series of images to enable an operator to evaluate changes in the object over time.

Claim 2(Cancelled)

Claim 33(Cancelled)

Claim 34(Amended): A non-transitory computer readable medium for programmed to instruct a computer to analyzing a plurality of biological entities comprising:

- a) acquire a first image of the biological entities, the first image being acquired prior to an introduction of a marker;
- b)add the marker to said plurality of biological entities, said marker being capable of identifying objects within said plurality of biological entities when detected using the imaging apparatus;

c) record a marked-up image in which spatial definitions of said objects are identifiable from said marker; and

d) generate a spatial definition for an object in said first image using data derived from said marked-up image [7] ;

e) acquire an initial series of images before adding a marker and recording a marked up image, and applying the spatial definition to the initial series of images to enable an operator to evaluate changes in the object over time.

Claim 37 (Amended): A imaging apparatus for analyzing a plurality of biological entities, said imaging apparatus comprising a computer programmed to:

acquire an initial series of images of the biological entities, the initial series of images being acquired prior to an introduction of a marker;

add the marker to said plurality of biological entities, said marker being capable of identifying objects within said plurality of biological entities when detected using the imaging apparatus;

record a marked-up image, after a marker is introduced to the biological entities, in which spatial definitions of said objects are identifiable from said marker;

generate a spatial definition for an object in the initial series of images using data derived from said marked-up image; and

applying the spatial definition to the initial series of images to enable an operator to evaluate changes in the object over time

The following is an examiner's statement of reasons for allowance: After reviewing the remarks made by the Applicant in response to the appeal brief the Examiner finds the remarks to be persuasive. The combination of cited references barker et al (US 5,347,139) and Hal et al (EP 0401077) do not teach or suggest the features of claims or the newly added features. No other found prior art of record teaches or fairly suggests the combination of claimed elements wherein:

          Analyzing a plurality of biological entities by acquiring a first image of the biological entities, the first image being acquired prior to an introduction of a marker; and adding the marker to said plurality of biological entities, said marker being capable of identifying objects within said plurality of biological entities when detected using the imaging apparatus; record a marked-up image in which spatial definitions of said objects are identifiable from said marker; and generate a spatial definition for an object in said first image using data derived from said marked-up image and acquire an initial series of images before adding a marker and recording a marked up image, and applying the spatial definition to the initial series of images to enable an operator to evaluate changes in the object over time.

The Examiner finds no reason or motivation to combine the above references in an obviousness rejection thus placing the application in condition for allowance.

1. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."
2. Claims 1, 5-32; 34 and 37.

### **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NANCY BITAR whose telephone number is (571)270-1041. The examiner can normally be reached on Mon-Fri (7:30a.m. to 5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vikkram Bali can be reached on 571-272-7415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nancy Bitar/  
Examiner, Art Unit 2624

**/VIKKRAM BALI/  
Supervisory Patent Examiner, Art Unit 2624**